ABSTRACT OF THE DISCLOSURE

A titanium based carbonitride alloy contains Ti, Nb, W, C, N and Co. The alloy also contains, in addition to Ti, Co with only impurity levels of Ni and Fe, 4-7 at% Nb, 3-8 at% W and has a C/(C+N) ratio of 0.50-0.75. The Co content is 9-<12 at% for general finishing applications and 12-16% for semifinishing applications. The amount of undissolved Ti(C,N) cores must be kept between 26 and 37 vol% of the hard constituents, the balance being one or more complex carbonitrides containing Ti, Nb and W. The invented alloy is particularly useful for semifinishing of steel and cast iron.